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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,417

12/22/2003

Jeff Scott Eder

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06/18/2008

ASSET TRUST, INC.
2020 MALTBY ROAD
SUITE 7362
BOTHELL, WA 98021

EXAMINER

CHENCINSKI, SIEGFRIED E

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

06/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,417	Applicant(s) EDER, JEFF SCOTT	
	Examiner SIEGFRIED E. CHENCINSKI	Art Unit 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 125-150 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 125-150 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/22/03, 9/13/04, 1/10/05, 5/10/05, 9/14/05, 2/28/06, 8/03/07, 11/22/07, 4/27/08.

DETAILED ACTION

Specification

1. OBJECTION

The abstract of the disclosure is objected to because it contains references to the drawings which obscure the purpose of the Abstract (See MPEP § 608.01(b)).

Correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 125-132 are rejected under 35 USC 101** because the claimed invention is directed to non-statutory subject matter.

Claims 125-132 recite a process of a predictive model comprising the steps of receiving data into a plurality of initial predictive models, selecting a best fit predictive model, to improve such model through stages and to develop a final predictive model. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)).

Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Applicant is advised to satisfy the statutory requirements for the claims. Applicant is also advised not to add any new matter to the specification or the claims.

3. Claims 125-150 are rejected under 35 USC 101 the claimed invention lacks patentable utility. The output of a predictive model is not tangible and the claimed invention is not supported by either a clearly asserted utility or a well established utility.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 125-150 are rejected under 35 U.S.C. 112, first paragraph.

Specifically, since the claimed invention is not supported by either a clearly asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention. The specification's guidelines for implementing the invention are filled with subjective judgments and lack a clear set of steps for implementing the invention. No two ordinary practitioners working independently would be able to replicate the end results of another practitioner who has used this invention because of the many subjective inputs and random model outcomes involved in this invention as described in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 125-150 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The independent claims lack the structure

needed to understand the invention. Manipulating general data with an unknown model is indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 125, 126, 129, 133, 134, 137, 141, 144, 148-150 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandretto (US Patent 5,812,988) in view of Jost et al. (US Patent 5,361,201).

Re. Claims 125, 133, 140 & 148, Sandretto discloses a computer-implemented predictive model method, apparatus, medium and computing infrastructure, comprising: receiving first input data into a plurality of initial predictive models (Fig. 1A-data storage; Col. 14, data processing, entering estimates of economic variables; a plurality of models - Fig. 1; initial predictive models resulting in initial estimates - Col. 14, I. 40);

- receiving an input data set from said initial model configuration (Col. 14, I. 40 – initial estimates) and a second input data as inputs into a second model stage (Col. 14, II. 47 – different estimates; recursive modeling – 44-45); and
- receiving said second model stage output as an input into a third predictive model stage to develop a final predictive model (Fig. 1; Col. 14, II. 44-45; Col. 8, I. 52—col. 9, I. 19 – the iterative, recursive steps which has at least three or more stages in predictive modeling).

The following parts of the claim elements do not have patentable weight because they are non-functional descriptive material:

- to develop an initial model configuration by selecting a best fit initial predictive model using a tournament after a training of each predictive model type is completed;
- to develop an improvement to said initial model configuration as an output, said second input data comprising one of said first input data, data not included in said first input data, and a combination thereof;
- where said final predictive model supports a regression analysis.

Sandretto does not explicitly disclose an induction model. However, Jost discloses the use of induction modeling (Front page, OTHER PUBLICATIONS, Cronan, et. al.,) in the context of “Real Estate Appraisal Using Predictive Modeling” (Title).

Therefore, an ordinary practitioner of the art at the time of Applicant’s invention would have seen it as obvious to have combined the disclosures of Sandretto and Jost in developing a computer-implemented predictive model method, apparatus, medium and computing infrastructure, motivated by a desire to provide a method for estimating simulated returns, asset values and risk measures using estimated financial variables pertaining to an asset, such as economic variables and asset-specific characteristics (Col. 1, ll. 11-15).

Re. Claims 126-132, 134-139, 141-147, 149 & 150, Sandretto generally discloses operation in the context of the claimed methodologies. For example,

Re. Claim 125, 134 and 141, wherein said second model stage receives a second input data and an input data set from the initial model configuration and transforms said inputs into a summary comprising a second stage model output (Col. 14, ll. 31-61; Col. 8, l. 52—Col. 9, l. 19).

Re. Claim 129, 137 & 144, wherein an initial predictive model is linear regression (Col. 4, l. 66).

7. Claims 127, 128, 130, 131 & 132, 135, 136, 138, 139, 140, 142, 143, 145, 146 & 147 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandretto (US Patent 5,812,988) in view of Jost et al. (US Patent 5,361,201).

Re. Claims 127, 128, 130, 131 & 132, 135, 136, 138, 139, 140, 142, 143, 145, 146 & 147, the examiner takes Official Notice that the following modeling and analytical methodologies were well known at the time of Applicant's invention: 126 - induction algorithm; 128 - genetic algorithms; 130 – entropy minimization, LaGrange, Bayesian and path analysis; 131 – tournament use; and 132 – a transform predictive model.

Therefore, **re. claims 127, 128, 130, 131 & 132, 135, 136, 138, 139, 140, 142, 143, 145, 146 & 147**, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have combined the disclosures of Sandretto and Jost in developing a computer-implemented predictive model method, apparatus, medium and computing infrastructure making use of numerous modeling and analytical methods, motivated by a desire to provide a method for estimating simulated returns, asset values and risk measures using estimated financial variables pertaining to an asset, such as economic variables and asset-specific characteristics (Col. 1, ll. 11-15).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Alexander Kalinowski, can be reached on (571) 272-6771.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231

or Faxed to (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

or Faxed to (571) 273-6792 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

June 14, 2008

/Narayanswamy Subramanian/

Primary Examiner, Art Unit 3691